

Supplementary table 2: Effect of Viral ARI with Detection of Individual Respiratory Viruses during Infancy on IPFT Indices at 3-years of Age

IPFT	IPFT Indices	Unit	Children without ARI Episodes during Infancy (n=52)	Children with Rhinovirus ARI during Infancy (n=101)	p value*	Children with RSV ARI during Infancy (n=67)	p value#	Children with Corona virus ARI during Infancy (n= 51)	p value@	Children with HMPV ARI during Infancy (n= 30)	p value\$
TBFVL	V_t/Kg	mL/kg	11.6 (10.1,13.8)	11.7 (10.3,13.6)	0.7	10.9 (8.5,13.6)	0.3	12.4 (10.6,14.2)	0.1	11.2 (9.5, 13.8)	0.7
	t_E/t_{tot}	%	57.7 (54.5, 59.8)	56.7 (54.6, 59)	0.3	57.4 (55.2, 59.7)	0.8	57.1 (54.5,59.5)	0.6	54.5 (53.3, 58.1)	0.03
	t_{PTEF}/t_E	%	37.6 (29.6,46.9)	41.9 (36, 52.5)	0.03	38.2 (29.9 , 46.6)	0.6	40.4 (29.4, 49.4)	0.3	40.2 (32, 59.3)	0.2
	TEF ₅₀	mL/s	154 (127, 182)	172 (147,221)	0.03	165 (127,210)	0.3	162(123,227)	0.2	181 (144, 238)	0.03
	TEF ₂₅	mL/s	135 (110, 173)	158 (129,189)	0.006	146 (109,186)	0.3	154 (126,190)	0.05	171.5 (138, 219)	0.01
	TEF ₁₀	mL/s	107 (82, 139)	130 (109,153)	0.006	117 (86,149)	0.3	122 (103,151)	0.05	138 (101,177)	0.01
	TEF ₅₀ /PTEF	%	87 (85,89)	90 (85, 93)	0.008	90 (85,93)	0.02	88(85,92)	0.2	88(86,94)	0.08
	TEF ₂₅ /PTEF	%	76 (69,84)	81 (74,87)	0.005	79 (71,83)	0.3	81 (72,87)	0.08	82 (74,88))	0.02
	TEF ₁₀ /PTEF	%	61 (53,71)	65(58,74)	0.005	62(55,69)	0.2	63(58,78)	0.4	66(56,75)	0.2
	V_{PTEF}/V_E	%	37 (24,45)	41 (35,50)	0.03	37 (31, 44)	0.6	39 (32,50)	0.2	39 (34, 54)	0.1
RTC	$V_{max,FRC}$	mL/s	50 (0,95)	58 (0,118)	0.6	60 (0,105)	0.8	72.5 (0,140)	0.2	107(25,147)	0.02
RVRTC	FEV	mL	137 (117,164)	121(85,147)	0.01	119 (93,139)	0.008	123(80,156)	0.08	120 (98,157)	0.06
	FEV _{0.5}	mL	68 (45,101)	58 (42,75)	0.03	50 (37,82)	0.02	49 (36,74)	0.02	58(43,89)	0.3
	FEV _{0.75}	mL	89 (69 125)	80 (58, 105)	0.05	77 (54, 102)	0.01	76 (52,108)	0.05	79(50,112)	0.2
	FEV _{1.0}	mL	112 (77,139)	99(73,128)	0.07	93 (71, 112)	0.01	102 (73,130)	0.2	98 (65,123)	0.1
	FEF ₂₅₋₇₅	mL/s	213 (123, 302)	160 (106,223)	0.02	147 (102,210)	0.01	139 (89, 210)	0.006	162 (97, 209)	0.03
	MEF ₁₀	mL/s	130 (70, 260)	80 (60,120)	0.009	80 (60,135)	0.01	80 (53, 113)	0.009	85 (60,110)	0.01
	MEF ₂₅	mL/s	178(100, 310)	130 (95, 188)	0.01	128 (93, 188)	0.02	115 (90,190)	0.01	120 (80,170)	0.01
	PEF	mL/s	282(205,400)	255(190,345)	01	242(193,342)	0.1	235 (155, 305)	0.03	245(160,370)	0.2

* Comparison between children with rhinovirus ARI to children without ARI episodes during infancy.

Comparison between children with respiratory syncytial virus (RSV) ARI to children without ARI episodes during infancy.

@ Comparison between children with human corona virus (HCoV) ARI to children without ARI episodes during infancy.

\$ Comparison between children with human metapneumovirus (HMPV) ARI to children without ARI episodes during infancy.

IPFT: Infants pulmonary function test, TBFVL: Tidal breathing flow volume loop, RTC: Rapid thoraco-abdominal compression, RVRTC: Raised volume rapid thoraco-abdominal compression, V_t/Kg : Tidal volume per unit body weight, t_E/t_{tot} : Ratio of expiratory time to total respiratory time, t_{PTEF}/t_E : ratio of time to peak tidal expiratory flow to total expiratory time. TEF₁₀/TEF₂₅/TEF₅₀: tidal expiratory flow when 10/25 50 % of tidal volume remaining for expiration. TEF₁₀ or TEF₂₅ or TEF₅₀/PTEF: ratio of TEF₁₀, TEF₂₅ or TEF₅₀ to Peaked tidal expiratory flow, V_{PTEF}/V_E : Ratio of

exhaled Volume to PTEF to tidal expiratory volume, $V'_{\max,FRC}$: Maximal flow at FRC, FEV: forced expiratory volume, FEV_{0.5}, FEV_{0.75}, FEV_{1.0}: Forced expiratory volume in 0.5/0.75/1 sec, MEF₂₅/MEF₁₀: Maximum expiratory flow at 25% or 10% of FVC, FEF₂₅₋₇₅: Forced expiratory flow between 25-75% of FVC. PEF: Peak expiratory flow.